NSERC
CRSNG

Natural Sciences and Engineering Research Council

Departmental Performance Report

For the period ending March 31, 2010

Minister of Industry

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Minister's Message

Last year, Canada was the last country to fall into the global recession. Today, our economy is beginning to emerge in the strongest position of any advanced country in the world. Investment and key stimulus measures as part of Year 1 of Canada's Economic Action Plan provided continued results and helped set Canada apart from its G-8 counterparts in terms of economic strength.

In 2009-10, Industry Canada worked quickly with its Portfolio Partners to deliver timely and targeted stimulus initiatives. Composed of Industry Canada and 10 other agencies, Crown corporations and quasi-judicial bodies, the Portfolio helps the department to build a more productive and competitive economy.

Industry Canada works closely with the Natural Sciences and Engineering Research Council of Canada (NSERC), which aims to make Canada a country of discoverers and innovators for the benefit of all Canadians. Last year, the Government of Canada invested $35 million over three years to expand temporarily the Canada Graduate Scholarships program, which supports Canada's top graduate students. This funding enabled NSERC to provide an additional 200 doctoral scholarships and 400 master's scholarships in fiscal year 2009-10. NSERC also received stimulus funding of $3.5 million over two years to fund 600 additional graduate internships in science and business through the Industrial Research and Development Internship program.

Moving forward, Industry Canada will continue to ensure that the jobs and industries of the future are created right here in Canada. We will follow through on delivering existing stimulus plans and continue to support government priorities. This means ensuring that we have the right conditions and regulatory frameworks in place to encourage investment in Canada, increasing support for R&D to improve Canada's long-term competitiveness and developing a digital economy.

I will work with the Industry Portfolio Partners, the private sector and other governments to enhance Canada's productivity and create the foundation for strong, sustainable and balanced growth.

It is my pleasure to present this year's *Departmental Performance Report* for the Natural Sciences and Engineering Research Council.

Tony Clement
Minister of Industry

Section 1:

Overview of the Agency

1.1 Summary Information

Raison d'être

The vision of the Natural Sciences and Engineering Research Council of Canada (NSERC) is to make Canada a country of discoverers and innovators for the benefit of all Canadians. NSERC aims to maximize the value of public investments in research and development (R&D) and to advance prosperity and quality of life in Canada by supporting the creation and transfer of knowledge in the natural sciences and engineering (NSE) and by ensuring that people are trained to discover, develop and apply knowledge and technology.

Responsibilities

NSERC is a departmental corporation of the Government of Canada created in 1978. It is funded directly by Parliament and reports to it through the Minister of Industry. The functions of NSERC, based on the authority and responsibility assigned to it under the *Natural Sciences and Engineering Research Council Act* (1976-1977, c.24), are to:

- promote and assist research in the natural sciences and engineering, other than the health sciences; and
- advise the Minister in respect of such matters relating to such research as the Minister may refer to the Council for its consideration.

NSERC Quick Facts: 2009-10

President: Dr. Suzanne Fortier

Chair: The Honourable James Edwards

Expenditure: $1.05 billion

Head Office: Ottawa, ON

Regional Offices:

- Moncton, NB
- Montreal, QC
- Mississauga, ON
- Winnipeg, MB
- Vancouver, BC

Employees: 370 Full-time Equivalents

Reach:

- 29,500 students and postdoctoral fellows
- 11,844 university professors
- 1,549 Canadian companies
- More than 100 universities and colleges

In 2009-10, NSERC invested just over $1 billion in post-secondary research and training in the natural sciences and engineering (NSE). NSERC is the most important funder of the direct costs of research in the NSE in Canadian universities. NSERC provides nearly one-fifth of the more than $4 billion invested in R&D in the natural sciences and engineering in Canadian universities and colleges. NSERC's budget represents 10 per cent of the federal government's expenditures for science and technology (S&T).

Strategic Outcomes

In order to achieve its mandate, NSERC works towards the following strategic outcomes:

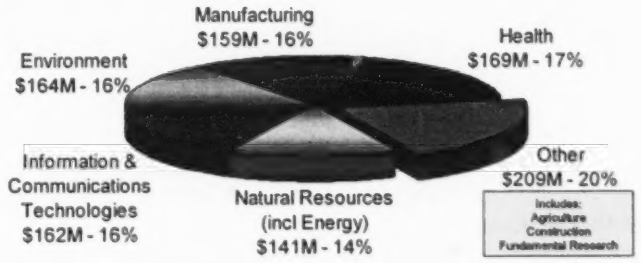
- **People: Highly skilled science and engineering professionals in Canada** –*Building our human capital in the natural sciences and engineering by attracting and developing highly skilled science and engineering professionals.*

- **Discovery: High quality Canadian-based competitive research in the natural sciences and engineering** – *Unleashing the power of our researchers to create knowledge and opportunities.*

- **Innovation: Productive use of new knowledge in the natural sciences and engineering** – *Seizing strategic opportunities for our country and realizing the benefits of research in industry and society.*

NSERC's focus on people, discovery and innovation maps directly onto the Federal S&T Strategy which emphasizes building a People Advantage, a Knowledge Advantage and an Entrepreneurial Advantage for Canada. Virtually all of NSERC's funding relates to these advantages. In addition, the majority of NSERC's expenditures are in areas that fall under the S&T priorities (natural resources and energy, environment, information and communications technologies, manufacturing and health) established by the government. Figure 1.1 highlights NSERC's priority area expenditures in 2009-10. In 2009-10, 80% of NSERC expenditures were in the priority areas, up from 73% in 2001-02.

Figure 1.1
NSERC Expenditures by Priority Area, 2009-10



Priority Areas: $795M – 80%

Excludes administration.

Program Activity Architecture

The chart below presents NSERC's Program Activity Architecture (PAA) in effect in 2009-10.

NSERC's Program Activity Architecture

Strategic Outcomes

People	Discovery	Innovation
Highly skilled science and engineering professionals in Canada	High quality Canadian-based competitive research in the natural sciences and engineering	Productive use of new knowledge in the natural sciences and engineering

Program Activities

Promote Science and Engineering
Sub-Activities
- PromoScience
- Centres for Research in Youth, Science Teaching and Learning (CRYSTAL)
- Prizes

Support Students and Fellows
Sub-Activities
- Undergraduate Student Research Awards (USRA)
- NSERC Postgraduate Scholarships (PGS)
- Alexander Graham Bell Canada Graduate Scholarships (CGS)
- Postdoctoral Fellowships
- Industrial Research and Development Fellowships (IRDF)
- Industrial Research and Development Internships (IRDI)
- Collaborative Research and Training Experience (CREATE)

Attract and Retain Faculty
Sub-Activities
- Canada Research Chairs (CRC)
- Industrial Research Chairs (IRC)
- Chairs in Targeted Areas of Research
- University Faculty Awards (UFA)

Fund Basic Research
Sub-Activities
- Discovery Grants
- Special Research Opportunity Grants
- General Support

Support for Research Equipment & Major Resources
Sub-Activities
- Research Tools and Instruments (RTI)
- Major Resources Support Grants
- Research Capacity Development in Small Universities

Fund Research in Strategic Areas
Sub-Activities
- Strategic Partnerships
- Collaborative Health Research Projects (CHRP)

Fund University-Industry-Government Partnerships
Sub-Activities
- Collaborative Research and Development Grants (CRD)
- Research Partnership Agreements
- Networks of Centres of Excellence* (NCE)

Support Commercialization
Sub-Activities
- Intellectual Property Mobilization
- Idea to Innovation Program (I2I)
- College and Community Innovation Program (CCIP)
- Centres of Excellence for Commercialization and Research (CECR)

* Includes Business-Led Networks of Centres of Excellence (BL-NCE).

Program Activity Architecture Crosswalk

Modifications to NSERC's Program Activity Architecture (PAA) were as follows:

- The Industrial Research and Development Internships (IRDI) Program was moved from program activity - Fund University-Industry-Government Partnerships to program activity - Support Students and Fellows. This amendment better represents the expected result of the IRDI program in which opportunities are created for skilled graduates to gain experience in industry.
- The Centres of Excellence for Commercialization and Research (CECR) Program was moved from Fund University-Industry-Government Partnerships to program activity - Support Commercialization. The program's name and objectives best align with the expected results of this program activity.

Redistribution of financial resources following modification of PAA

($ millions)		New Program Activity 2009-2010		
		Program Activity: Support Students and Fellows	Program Activity: Support Commercialization	Total
Old Program Activity	Fund University-Industry-Government Partnerships	6.8	19.1	25.9

1.2 Summary of Performance

Financial Resources and Human Resources

2009-10 Financial Resources ($ millions)		
Planned Spending	**Total Authorities**	**Actual Spending**
1,039.9	1,055.2	1,051.3
2009–10 Human Resources (FTEs)		
Planned	**Actual**	**Difference**
357	371	14

Performance Summary

Given the nature of R&D support programs, the impact of NSERC's investment in research and training in the NSE can be best assessed over the long term. Therefore, the expected results reported in NSERC's Report on Plans and Priorities 2009-10 should be considered mostly as planned results for the future. The performance information presented in this year's DPR is a retrospective look at outcomes resulting from NSERC funding over the past decade, and in some cases even longer.

Strategic Outcome 1: People - Highly skilled science and engineering professionals in Canada		
Performance Indicator	**Target**	**2009-10 Performance**
Total researchers per thousand employed relative to other Organization for Economic Cooperation and Development (OECD) countries	Maintain top 10 world ranking (Canada was 8th in 2005)	Canada currently stands in 11th position, but only slightly (less than 2%) behind Australia in 9th (see Figure 2.1, p.19). Canada's ratio of number of researchers per thousand employed has grown by 26% over the past decade as compared to the OECD average growth rate of 19%.

Alignment to Government of Canada Outcomes: An innovative and knowledge-based economy.
(All program actvities under this Strategic Outcome are linked to an innovative and knowledge-based economy, please see note on NSERC links to government of Canada outcomes on p.9.)

Program Activity	2008-09 Actual Spending ($ millions)	2009-10 ($ millions)[1]			
		Main Estimates	Planned Spending	Total Authorities	Actual Spending
Promote Science and Engineering	4.7	6.6	6.6	6.6	6.6
Support Students and Fellows	151.4	149.4	152.2	168.8	159.9
Attract and Retain Faculty	152.8	165.7	167.2	165.2	154.6
Total	**308.9**	**321.7**	**326.0**	**340.6**	**321.1**

Strategic Outcome 2: Discovery - High quality Canadian-based competitive research in the natural sciences and engineering		
Performance Indicator	**Target**	**2009-10 Performance**
Average number of times that Canadian papers in the NSE are cited by other researchers (Average Relative Citation [ARC] factor of Canadian publications in the NSE — comparison with other countries)	Maintain top 10 world ranking (currently Canada is 7th)	Canada's ARC in the NSE ranks 5th and is only slightly behind the top four countries of the G20 (see Figure 2.9, p.31). Canada has maintained its 7th place ranking in scientific publication production (see Figure 2.11, p.33) and on a per capita basis is the most productive of the G8 (see Figure 2.12, p.33).

Alignment to Government of Canada Outcomes: An innovative and knowledge-based economy.
(All program activities under this Strategic Outcome are linked to an innovative and knowledge-based economy, please see note on NSERC links to government of Canada outcomes on p.9.)

Program Activity	2008-09 Actual Spending ($ millions)	2009-10 ($ millions)[1]			
		Main Estimates	Planned Spending	Total Authorities	Actual Spending
Fund Basic Research	375.6	366.8	366.8	365.1	362.9
Support for Research Equipment and Major Resources	76.5	30.4	46.4	40.3	74.2
Total	**452.1**	**397.2**	**413.2**	**405.4**	**437.1**

Strategic Outcome 3: Innovation - Productive use of new knowledge in the natural sciences and engineering		
Performance Indicator	**Target**	**2009-10 Performance**
Percentage growth in the number of partner companies annually	Greater than 5%	NSERC partnered with 1,539 Canadian firms in 2009-10 to transfer knowledge created in the university sector to private firms that create economic wealth. Over the past ten years the average annual growth rate in the number of partners has been 9.3%. Sixty-two of the top 100 R&D firms in Canada are partners with NSERC.

Alignment to Government of Canada Outcomes: An innovative and knowledge-based economy.
(All program activities under this Strategic Outcome are linked to an innovative and knowledge-based economy, please see note on NSERC links to government of Canada outcomes on p.9.)

Program Activity	2008-09 Actual Spending ($ millions)	2009-10 ($ millions)[1]			
		Main Estimates	Planned Spending	Total Authorities	Actual Spending
Fund Research in Strategic Areas	84.3	98.4	124.1	124.2	104.0
Fund University-Industry-	168.9	98.4	109.3	110.5	119.9

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Fund Research in Strategic Areas	84.3	98.4	124.1	124.2	104.0
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Government Partnerships					
Support Commercialization	15.6	26.8	46.4	44.5	41.5
Total	**268.8**	**223.6**	**279.8**	**279.2**	**265.4**

1. Commencing in the 2009-10 Estimates cycle, the resources for Program Activity: Internal Services are displayed separately from other program activities; they are no longer distributed among the remaining program activities, as was the case in previous Main Estimates. This has affected the comparability of spending and FTE information by Program Activity between fiscal years.

Strategic Outcome 4: Internal Services					
		2009-10 ($ millions)[1]			
Program Activity	2008-09 Actual Spending ($ millions)	Main Estimates	Planned Spending	Total Authorities	Actual Spending
4.1 Internal Services	N/A	25.9	25.9	30.0	27.7
Total	**N/A**	**25.9**	**25.9**	**30.0**	**27.7**

NSERC Links to Government of Canada Outcomes

NSERC investments contribute significantly to many of the Government of Canada's strategic outcomes. NSERC has chosen to link all of its program activities to the Government of Canada outcome: an innovative and knowledge-based economy which is most directly related to our mandate and activities. Because NSERC funds research and training leading to a wide-range of economic and societal impacts in virtually every sector, many of NSERC's long-term outcomes are also directly linked to other important Government of Canada outcomes, such as strong economic growth, income security and employment for Canadians, a clean and healthy environment, healthy Canadians with access to quality health care, and safe and secure communities. For simplicity, the "innovative and knowledge based economy" outcome is by far the most appropriate for NSERC to use in linking resources and results.

Contribution of Priorities to Strategic Outcomes

Operational Priorities

Priority	Type	Status	Linkages to Strategic Outcome(s)
1. People Advantage			
• Enable more students to gain research experience in industry while undertaking advanced studies in Canada	On-going and new	• **Met All** – Canada's Economic Action Plan increase for the Industrial R&D Internship program funded an additional 600 students to work with industry.	**Highly skilled science and engineering professionals in Canada** Through research and research training, NSERC fosters the development of skilled workers who will
• Launch the Collaborative Research and Training Experience (CREATE) program to encourage collaborative and	New	• **Met All** - The first CREATE awards were funded in 2009-10. A total of 20 awards were made for an expenditure of $3.0 million in 2009-10 and $6.0	

Operational Priorities

Priority	Type	Status	Linkages to Strategic Outcome(s)
integrative approaches, address significant scientific challenges associated to Canada's research priorities, and facilitate the transition of new researchers from trainees to productive employees in the Canadian workforce.		million per year over the next five years. Awards include the NSERC CREATE Training Program in Nanoscience and Nanotechology at the University of Toronto.	become leaders across the private and public sectors.
• Launch the Vanier Canada Graduate Scholarship (CGS) and the CGS Michael Smith Foreign Study Supplements programs and review NSERC's suite of scholarships and fellowship programs to ensure optimal results in relation to the evolving environment.	New	• **Met All** – Programs were successfully launched with 54 Vanier Canada Graduate Scholarships and 82 CGS Michael Smith Foreign Study Supplements awarded in 2009-10. Evaluations of NSERC's PGS and CGS programs were completed in 2009-10.	
2. Knowledge Advantage			
• Enable new faculty with high research potential to firmly launch their research programs and demonstrate their capabilities as competitive contributors to Canada's research, research training and innovation base.	On-going	• **Met All** – 365 new professors were awarded an NSERC Discovery Grant in 2009-10. Theses new professors will be able to fund their research expenses, including student stipends, and generate new knowledge over the next five years.	**High quality Canadian-based competitive research in the natural sciences and engineering** NSERC is committed to creating a strong foundation for research and research training in Canada. This is embodied in NSERC's Discovery Grants Program, which provides a base from which researchers can establish and build their research programs, and gives them the opportunity to unleash their creative power.
• Expand the Discovery Accelerator Supplement (DAS) program to provide timely additional resources to scientists/engineers to accelerate progress and maximize impact, particularly in the priority areas identified in the Federal S&T Strategy.	On-going	• **Met All** – In 2009-10, 231 Discovery Accelerator Supplements were awarded for $9.2 million, a 37% increase over the 161 awards in 2008-09 for $6.5 million. Over 70% of the awards were in the priority areas.	
• Adopt peer review structures and processes that ensure flexibility and continuously adapt to the changing research environment following the recommendations of the International Review of the Discovery Grant Program and the Grant Selection Committee Structure Review.	New	• **Met All** – A new committee structure was implemented for the Discovery Grants program and the second year of a revised review process was in effect. These changes are ensuring that funding is allocated to world-class Canadian researchers at the forefront of their disciplines.	

Government Partnerships					
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Operational Priorities

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Operational Priorities

Priority	Type	Status	Linkages to Strategic Outcome(s)
3. Entrepreneurial Advantage			
• Implement the industry-driven strategies addressed in Budget 2008 aimed at the following sectors: automotive, manufacturing, forestry, and fisheries; explore means to increase and sustain existing partnerships across all sectors during the current economic situation.	New	**Met All** – For the automotive sector, NSERC has (with partners) developed the Automotive Partnership Canada and is working to invest $85 million in partnered research. In manufacturing, NSERC has allocated $31 million over five years to three new Strategic Networks, and at least 22 Strategic Projects. In forestry, NSERC is investing $36.5 million over five years in projects identified and developed in collaboration with FP Innovations. In the fisheries sector NSERC is investing $24 million over five years in two Strategic Networks and at least 27 Strategic Projects.	**Productive use of new knowledge in the natural sciences and engineering in Canada** NSERC aims to maximize the value of public investments in research for the benefit of all Canadians by promoting research-based innovation, university-industry partnerships, and technology transfer activities.
• Expand the National Research Council (NRC)-NSERC-Business Development Bank of Canada (BDC) partnership to accelerate commercialization of publicly funded research.	On-going	**Met All** – The NSERC-NRC-BDC partnership funding increased from $2.2 million in 2008-09 to $2.4 million in 2009-10.	
• Continue to increase the number of partnerships in priority areas identified in the Federal S&T Strategy: environment, energy, information and communication technology (ICT).	On-going	**Met All** – Nearly 90% of NSERC's partnership program funding was devoted to Federal S&T priority areas in 2009-10, involving more than 100 new firms.	
• Develop an NSERC Strategy for Partnership and Innovation (SPI).	New	**Met All** – The SPI initiative was launched in November of 2009. There has been a strong response and participation in new initiatives created under the Strategy including the new Engage and Interaction grants.	
• Review NSERC's intellectual property policy to remove any barriers to commercialization of research and to facilitate research agreements.	New	**Met All** – NSERC's Intellectual Property (IP) Policy has been revised to allow for more flexible access to IP developed as a result of NSERC funding, while at the same time ensuring that the rights of all participants are protected. As of December 1, 2009, all Intellectual Property Agreements must contain the mandatory elements outlined in the new IP Policy. This new policy was featured as an action in the SPI.	

Operational Priorities

Priority	Type	Status	Linkages to Strategic Outcome(s)
• Assess the need for a Pre-Collaborative Research and Development (Pre-CRD) grant pilot program to increase the number of university-industry interactions and partnerships.	New	**Met All** – The pre-CRD initiative was launched as the Engage Grants Program at the end of November 2009, to foster new partnerships between academics and Canadian based companies that have previously never worked together. The program has been very well received by the academic and industrial communities. In 2009-10, 56 Engage awards for $1.4 million were made.	

Management Priorities

Priority	Type	Status	Linkages to Strategic Outcome(s)
Demonstrate NSERC's accountability and how the results of its investments in Canadian research and training benefit Canadians.			All Strategic Outcomes NSERC will place a strong emphasis on measuring and demonstrating results to Canadians, and will continue to assure high standards of accountability and client service.
• Meet the commitments of the federal S&T Strategy related to governance, accountability and value for money.	On-going	**Met All** - NSERC continues to update and improve its governance structure and practices. The research funding agencies are coordinating programs and processes to facilitate multidisciplinary research and activities that span agency mandates, to improve coordination between programs and to improve client service to the research community. The agencies have completed the harmonization of a financial administration guide and have made progress on harmonized web pages for common initiatives.	
• Ensure compliance with all new policies and frameworks (i.e. Internal Audit, Evaluation, Management Accountability Framework [MAF]).	On-going	**Met All** - NSERC has developed new terms of reference for the Committee on Research Integrity, updated the conflict of interest guidelines for Council and increased the Executive Committee's role in governance, Council membership and Council evaluation. In April 2009, an Audit Committee was formed, as required by the Treasury Board Secretariat's (TBS) Policy on Internal Audit. Also in April 2009, the Executive Management Committee of NSERC took on the role of Departmental Evaluation Committee. A review of transfer payment practices was also conducted.	

Management Priorities

Priority	Type	Status	Linkages to Strategic Outcome(s)
• Reduce paper-based processes and harmonise business solutions (i.e.Enterprise Award Management System [EAMS] and Canadian Common CV [CCV]).	On-going	**Somewhat Met** – The EAMS pilot was completed in March 2010. Whereas the technical solution was not deemed to meet Council's requirements, significant advances have been made in identifying areas for harmonizing business processes across programs. Valuable lessons learned will serve to provide direction for a more integrated system in the future. Significant progress has been made in the definition of a standard data set related to CCV project. NSERC is working closely with its partners in planning the replacement of the current application with a modern, flexible and standardized new solution.	
• With SSHRC and CIHR, develop an action plan to revise the Tri-Council Policy Statement: Integrity in Research and Scholarship (TCPS-I).	New	**Somewhat Met** – The granting agencies released an update in February 2010 on the work they are doing, to improve the agencies' process for research and scholarly integrity, and financial accountability. A report reviewing the integrity policy framework was published in October 2009. It is expected that a revised Tri-agency draft policy on research integrity will be completed and ready for consideration by stakeholders in time for their annual meetings in spring 2011. The revised Tri-Agency policy is expected to be finalized by December 2011. Institutions will be asked to ensure that their institutional research integrity policies conform with the revised policy within one year of the launch date. The Council of Canadian Academies report on research integrity (Fall 2010) will also be used to shape future policies.	
• With SSHRC and CIHR, finalize, approve and release the second edition of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS-E).	New	**Somewhat Met** – In 2009-2010, the Interagency Advisory Panel on Research Ethics (Panel) consulted nationally on comprehensive revisions to the TCPS . The policy was first adopted by NSERC, SSHRC and CIHR in 1998. Key changes include a new structure, the TCPS eight	

Management Priorities

Priority	Type	Status	Linkages to Strategic Outcome(s)
		principles distilled to three, emphasis on a proportionate approach to research ethics review, and new chapters focused on multi-jurisdictional research, qualitative research and research involving Aboriginal Peoples. The consultation, a national outreach, involved meetings with roughly 2,000 members of the research community and yielded 370 written submissions. The draft policy is now under consideration by NSERC, SSHRC and CIHR with a view to officially adopting the TCPS second edition in fall 2010 and subsequent release to the community in winter 2011.	
• Enhance capacity and stay at the forefront of the field of performance measurement for S&T investments.	New	**Met All** –A comprehensive database system, NSERC-STATS, has been developed that presents NSERC, Canadian and international S&T data in a user-friendly way. The evaluation group has been expanded and some new performance measures (e.g. econometric) have been adopted.	
• With CIHR, SSHRC and CFI, work to improve reporting and integrated measurement of results and impacts of investments in post-secondary research and advanced training.	New	**Mostly Met** – A comprehensive data gathering and analysis of baseline information on performance indicators common to all agencies was carried out and work is now underway to produce a streamlined report highlighting results and impacts.	
Increase Visibility of Canadian Research			All Strategic Outcomes
• Develop new outreach mechanisms and tools to target new audiences and demonstrate the benefits and results from Canadian research.	New	**Met All** - As part of the SPI launch, a full range of new vehicles were developed including an interactive website, an e-newsletter, as well as a series of printed materials to be used by Regional Offices as they promote SPI in their regions. Developed a series of high-impact fact sheets that highlight NSERC investments in research that support and advance the Government of Canada's Science and Technology	The ongoing work to improve our communications products will help to demonstrate the value and impact of NSERC funding.

Management Priorities

Priority	Type	Status	Linkages to Strategic Outcome(s)
		Strategy both at a national and regional level. Through more than 160 events and announcements, NSERC was also able to reach new audiences and showcase the benefits of research in science and engineering to Canadians. Another avenue for highlighting the impact of NSERC-funded research is a partnership we secured with the Government of Canada's science gateway - science.gc.ca.	
• Increase Canada's awareness of research achievements by leveraging existing relationships with core audiences through the NSERC regional offices, former NSERC Council members, former NSERC prize winners and journalists, to ensure that audiences are reached at national, regional and local levels.	On-going and New	**Met All** - NSERC has been planning and implementing a series of presentations hosted by Dr. Fortier, on topics of importance to both scientists and key opinion leaders. We recently partnered with the Canada 2020 Oil Sands Symposium on a panel that featured NSERC-funded researchers from the University of Alberta who discussed topics related to "greening the oil sands". NSERC has been leveraging the reach of Council members by inviting them to serve as representatives at announcements across the country. For example, NSERC Council members have assisted with the roll-out of the new Strategy for Partnership and Innovation and have served as presenters at other important announcements such as the College and Community Innovation program.	

Risk Analysis

NSERC's operational and management priorities are ongoing and are monitored according to NSERC's integrated Results-based Management and Accountability Framework (RMAF) and Risk-based Audit Framework (RBAF). In the development of the RMAF-RBAF, 16 different types of risks were identified and three risks are considered significant. These 3 significant risks which may impact NSERC's performance over the reporting period are summarized below:

Risk	Mitigation
Ability to remain relevant and make and implement strategic decisions that align with evolving context.	NSERC ensures the relevance of its activities and investments by aligning very closely with the priorities of the Federal S&T Strategy. NSERC actively consults stakeholders through various governance and advisory committees. NSERC conducts surveys and consultations to keep abreast of issues, opportunities and challenges.
Ability to ensure optimal funding decisions and to maintain control and accountability over expenditures.	NSERC funding decisions are informed by a rigorous peer review process to foster excellence and ensure that the research supported is gauged against the highest international standards. The blue-ribbon committee that conducted the International Review of the Discovery Grants Program concluded that the program "is an unusually effective and efficient method of research support, particularly in the Canadian context." NSERC, together with SSHRC and CIHR, have a Memorandum of Understanding with the institutions that administer funds from the federal granting agencies on behalf of researchers, to ensure that the funds entrusted to NSERC are well managed and are used effectively, economically and in the best interest of the research supported by the award.
Ability to ensure integrity in research.	NSERC grant recipients must abide by the *Tri-Council Policy Statement: Integrity in Research and Scholarship* which provides a formal process to investigate possible breaches of scientific integrity brought to NSERC's attention.

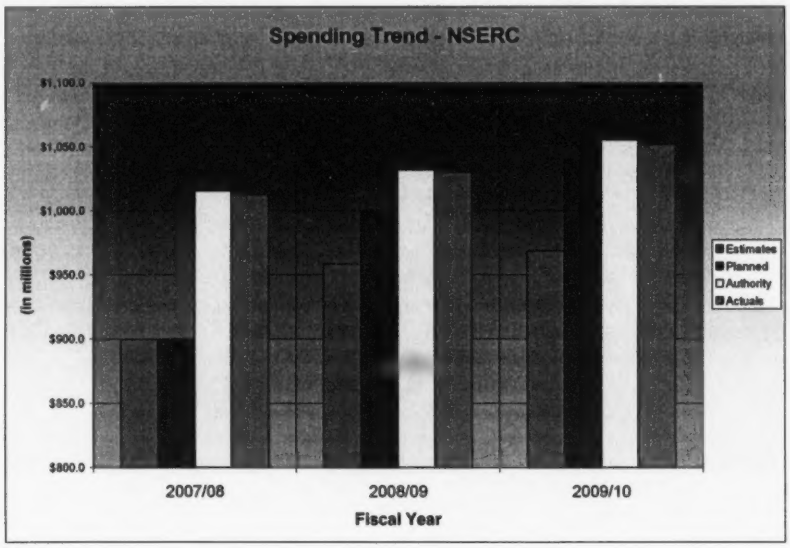
In addition, NSERC experiences risks related to the current circumstances that are integral to all of its programs and that could influence performance. For example, the reduced capacity of Canadian industry to engage in R&D in times of economic uncertainty may compromise NSERC's ability to deliver on partnership programs that require contributions from industrial partners.

While NSERC administers a significant budget, the Council's overall risk level compared to other government entities is considered low, in terms of continuity of government operations and the maintenance of services to, and protection of interests of, the Canadian public. This assessment of risk level is further supported by the Blue Ribbon Panel Report on Grants and Contributions which stated, "The record of performance by the federal research granting agencies, including CFI, has been deemed high by international standards. The two councils and CIHR have successfully managed their own research portfolios, using a rigorous system of oversight, including detailed memoranda of understanding signed by all recipient institutions and regular financial monitoring visits of recipient universities."

Expenditure Profile

During the 2009-2010 fiscal year, NSERC spent $1,051.3 (including the Employee Benefit Plan) million to meet the expected results of its program activities and contribute to its strategic outcomes.

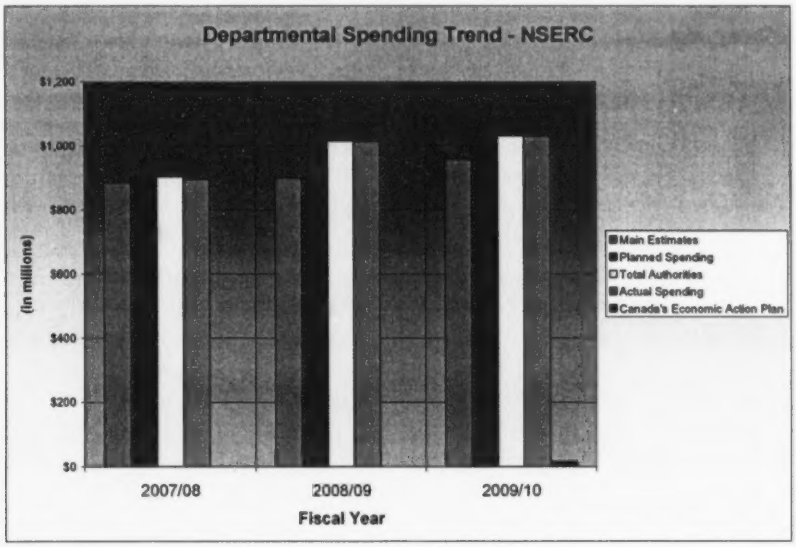
The figure below illustrates NSERC's spending trend from 2007-2008 to 2009-2010. For the 2007-2008 and 2008-2009 periods, all figures appear as reported in previous Departmental Performance Reports.



Over the three-year period NSERC has received base budget increases in Budgets 2007 and 2008, and funding for specific programs including: the Alexander Graham Bell and Vanier Canada Graduate Scholarships programs, the Centres of Excellence for Commercialization and Research (CECR) program, the International Polar Year Program, the College and Community Innovation program, the Industrial Research and Development Internship Program, the Business-Led Networks of Centres of Excellence and funding for the Canadian Light Source.

Canada's Economic Action Plan (CEAP)

In 2009-10, NSERC received additional funding for the Alexander Graham Bell Canada Graduate Scholarships program ($14 million) and the Industrial R&D Internship program ($2.5 million). The $16.5 million in CEAP funding represented 1.6% of NSERC's total expenditures in 2009-10. The figure below presents NSERC's spending trends highlighting CEAP funding.



Voted and Statutory Items

The table illustrates the way in which Parliament approved NSERC's resources.

($ millions)

Vote # or Statutory Item (S)	Truncated Vote or Statutory Wording	2007–08 Actual Spending	2008–09 Actual Spending	2009–10 Main Estimates	2009–10 Actual Spending
1	Operating expenditures	39.0	43.7	41.4	42.1
5	Grants and contributions	969.6	981.8	922.9	1,004.2
(S)	Contributions to employee benefit plans	3.9	4.3	4.1	5.0
	Total	1,012.5	1,029.8	968.4	1,051.3*

* 2009-10 Actual Spending is greater than 2009-10 Main Estimates due to Budget 2009 initiatives.

Section 2:

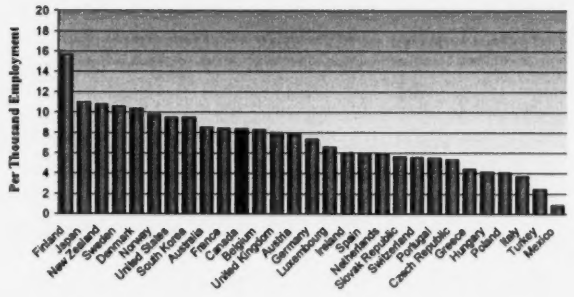
Analysis of Program Activities by Strategic Outcome

Strategic Outcome:

Highly Skilled Science and Engineering Professionals in Canada

By supporting 29,500 students and fellows at Canadian universities and abroad, providing programs to support university faculty, and promoting science and engineering to Canadian youth, NSERC will ensure a reliable supply of highly qualified personnel (HQP) for Canadian industry, government, and academia. The majority of NSERC-funded students have a strong interest in a career in R&D and the performance data collected indicates that this is occurring to a large degree. The training support NSERC provides will help Canada maintain or improve the number of researchers employed in the country. Figure 2.1 presents the total researchers per thousand employed relative to other Organization for Economic Cooperation and Development (OECD) countries. Canada currently stands in 11th position, but only slightly (less than 2%) behind Australia in 9th. Canada's ratio of number of researchers per thousand employed has grown by 26% over the past decade as compared to the OECD average growth rate of 19%.

Figure 2.1
Number of Researchers Per Thousand Employment, 2007 or Most Recent Year



Source: OECD, excludes Iceland.

The following provides details of NSERC's performance for the three program activities that fall under this strategic outcome. Resulting **benefits to Canada** include: building a stronger culture of science and innovation in our country and encouraging young people to study science and

engineering, increasing the number of people with advanced degrees in science and engineering, and supporting top scientists and engineers to serve as magnets to other high-calibre researchers and students to come to, or to remain in, Canada.

Program Activity ► Promote Science and Engineering

Description: This program activity encourages popular interest in science, math and engineering and aims to develop science, math and engineering abilities in Canadian youth.			
Expected Result: Student interest in research in the sciences, math and engineering is encouraged.			
Performance Indicators	**Targets**	**Performance Status**	**Performance Summary**
• Percentage of science promotion projects that successfully complete the planned activity	• Greater than 80%	• Exceeded	• Post award surveys indicate that 85% of PromoScience grants successfully fulfill the objectives of the grant.
• Number of knowledge transfer activities that target teachers	• Greater than 100	• Exceeded	• More than 200 knowledge transfer activities benefiting more than 2,500 teachers were conducted.

Financial Resources ($ millions) 2009-10		
Planned Spending	**Total Authorities**	**Actual Spending**
6.6	6.6	6.6

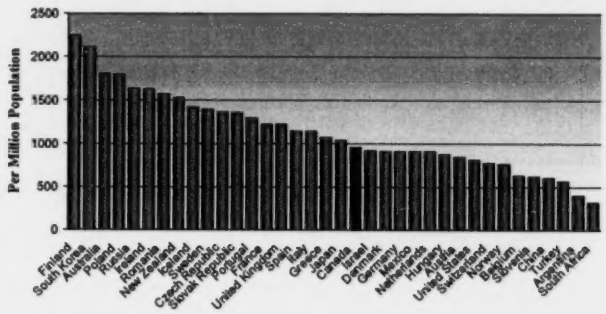
Human Resources (Full-Time Equivalents) 2009-10		
Planned	**Actual**	**Difference**
1	1	0

Key Programs		
Program	**Description**	**Expenditures 2009-10 ($ millions)**
PromoScience	PromoScience provides support to non-profit and public organizations that work with young Canadians in order to build their interest in science and engineering, motivate and encourage their participation in science and engineering activities, and train teachers who are responsible for the science and math education of young Canadians.	2.7
CRYSTAL	CRYSTAL (Centres for Research in Youth, Science Teaching and Learning) provides a forum for the many partners who share an interest in developing and enhancing the skills of, and resources available to, science and mathematics teachers, and in enriching the preparation of Canadian children in these foundation subjects.	0.6
Prizes	NSERC prizes recognize outstanding individual Canadian researchers, research teams and students. They enhance the career development of outstanding and highly promising scientists and engineers and distinguish the sustained excellence of faculty members at Canadian universities. They also publicly recognize lasting partnerships in R&D between university and industry and celebrate young Canadian entrepreneurs.	2.4

The PromoScience program is allowing organizations active in science promotion to expand their offerings and to engage many more young Canadians, especially girls and aboriginal youth. This is critical as young Canadians are less inclined to select science or engineering as a discipline when they enter university (see Figure 2.2) as compared to many other nations. At the end of each PromoScience grant a final report is submitted. For those grants ending in 2009-10,

85% of recipients rated the outcome of the grant as successful. These grants enabled the recipient organizations to reach hundreds of thousands of Canadian youth and promote a science culture.

Figure 2.2
First University Degree Awarded in the Natural Sciences or Engineering Per Capita, 2006 or Most Recent Year



Source: National Science Foundation.

PromoScience Recipient – ACTUA
Science and Engineering Camps for Aboriginal Youth in Six Rural, Northern and Underserved Communities

This PromoScience grant supported the delivery of customized hands-on science and engineering workshops as well as summer camps for Aboriginal youth in the following six identified communities: Rankin Inlet; Igloolik, Tuktoyaktuk, Kugaruuk, Nain, and Charlottetown. Over the course of the three year grant the total number of youth reached was 3,125. These results were more than four times the original projection of 750 youth.

The objective of the program was to engage and inspire Aboriginal youth to explore and discover science and engineering using fun activities related to their daily lives. In addition, Aboriginal community members served as role models and mentors to assist with the delivery of culturally relevant programming. The NSERC grant allowed for the development of new and relevant programming and a new week of curriculum was developed with fresh activities covering subjects such as space, ecology, engineering and chemistry. The activities in this program were designed to include elements of problem solving and team building and all activities demonstrate to youth how science and engineering are relevant to their daily lives. Most importantly, through their involvement in this program, aboriginal youth learned that they have a significant role to play in shaping a diverse new generation of discoverers and innovators.

The CRYSTAL Pilot Program was created in October 2003. The program has increased the scale and changed the nature of research activities in science, mathematics and technology education. The program has increased knowledge translation and outreach activities, with the Centres having undertaken a wide variety of activities focused on reaching teachers. By the end of the third year, Centres had conducted an estimated 677 knowledge translation activities targeting teachers and developed approximately 479 knowledge translation tools for teachers. Although

the program had successful results it did not progress past the pilot phase after the Strategic Review of 2008-09 because it was not considered to be central to NSERC's mandate.

To recognize the important achievements of Canadian research scientists and engineers, and, in the process, to help retain faculty in Canada, NSERC awards significant research prizes to individuals and teams. A profile of the 2009-10 winner of NSERC's Gerhard Herzberg Canada Gold Medal for Science and Engineering is presented below.

Gilles Brassard, Computer Science
Université de Montréal

Ranking among the most influential computer scientists in the world, Gilles Brassard is recognized as the founder of quantum information science in Canada and one of its earliest pioneers worldwide. Through his visionary thinking and groundbreaking research, he has played a pivotal role in transforming this field from what initially appeared to be a fringe pursuit into an exciting and dynamic research area in which quantum mechanics is exploited in novel methods to enhance our information-processing capabilities in ways previously thought to be impossible.

Professor Brassard's most celebrated breakthroughs are the invention of quantum cryptography and quantum teleportation, both universally recognized as fundamental cornerstones of the entire discipline. His other influential discoveries include privacy amplification, entanglement distillation and amplitude amplification. Quantum cryptography makes it possible to communicate in perfect secrecy under the nose of an eavesdropper who has unlimited computational power and whose technology is restricted only by the laws of physics.

The author of three books, translated into eight languages, and former Editor-in-Chief of the Journal of Cryptology, Professor Brassard's papers and books have been cited more than 15,000 times. Among his many honours, he is the first Canadian to have been elevated to the rank of Fellow by the International Association for Cryptologic Research.

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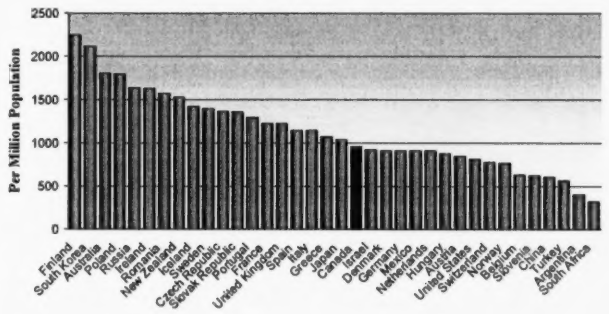

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Program Activity ► Support Students and Fellows

Description: This program activity supports the training of highly qualified personnel through scholarship and fellowship programs.

Expected Result: A supply of highly qualified people with leading-edge scientific and research skills for Canadian industry, government, and universities.

Performance Indicators	Targets	Performance Status	Performance Summary
• Percentage of students supported that are actively employed in Canada after graduation	• 75%	• Exceeded	• 82% of students supported were working in Canada 9 years after their award. More than one-half of those abroad were planning to come back to Canada (NSERC survey data, see Figure 2.3)
• Average completion rates among NSERC award recipients vs. general NSE student population	• Completion rate 10% greater than general NSE student population	• Exceeded	• 98% of the respondents completed the degree (master's or doctoral) for which they received NSERC funding (NSERC survey data, see Figure 2.3) vs. overall degree completion of 80%.

Financial Resources ($ millions) 2009-10		
Planned Spending	Total Authorities	Actual Spending
152.2	168.8	159.9

Human Resources (Full-Time Equivalents) 2009-10		
Planned	Actual	Difference
24	26	+2

Key Programs		
Program	Description	Expenditures 2009-10 ($ millions)
Undergraduate Student Research Awards	Held in university (3,411) or industry laboratories (740), this program provides funding for an undergraduate student to spend a four-month work term in a university or industrial research environment.	18.6
NSERC Postgraduate Scholarships	At the master's (920) and doctoral (1,564) levels, NSERC supports students by providing an annual stipend that enables them to continue to pursue their research interests. Up to four years of support is available over the course of a candidate's graduate studies. Opportunities for study at institutions in Canada and abroad as well as at Canadian industrial laboratories (544) are available.	51.7
Canada Graduate Scholarships (CGS)	Canada Graduate Scholarships (tenable only at Canadian universities) are awarded to the most outstanding candidates at the master's (1,156) and doctoral (1,037) levels. CGS Foreign Study Supplements (82) allow CGS scholars to pursue short-term training outside the country. In the first year of the program, 54 awards were made under the new Vanier CGS.	59.1
NSERC Postdoctoral and Industrial R&D Fellowships	These two-year awards support researchers who have completed their Ph.D., and provides them with funds to continue their programs of research. The awards may be held at any academic institution through a Postdoctoral Fellowship (504), or at a Canadian company that conducts research through an Industrial R&D Fellowship (214).	20.9

NSERC provides direct financial support to students from the undergraduate to postdoctoral levels through key programs as described above. In addition, NSERC funds students and fellows through support provided by an NSERC-funded professor from his or her NSERC grant. The training of 18,200 students and fellows is supported in full or in part through this route.

NSERC conducts ongoing surveys of funded students at all levels. Figure 2.3 highlights some important achievements of NSERC-funded students and fellows. All of NSERC's scholarship and fellowship programs are achieving their objectives and the funded students are going on to well-paying and productive jobs in Canada. Almost all (98%) of the NSERC-funded students complete their degree and they do so in a shorter period than unfunded students (see Figure 2.4).

Since 1978, NSERC has supported the training of nearly 90,000 master's and doctoral students in the NSE. General macro-level economic outcomes for university graduates in the natural sciences and engineering provide ample evidence of the positive outcomes for NSERC-funded students, both directly and indirectly supported. As Figure 2.5 demonstrates, unemployment levels for persons seeking work in natural science or engineering occupations are considerably below national levels; annual salaries for this group are nearly one-third greater than the national average; and employment opportunities continue to grow as the natural science and engineering labour force surpasses the 1,000,000 mark resulting in the fastest growing occupational group over the past 20 years.

In 2009-10 an evaluation of NSERC's Postgraduate Scholarships program and the Canada Graduate Scholarships program was concluded, with major findings highlighted below.

Evaluation Results

NSERC Postgraduate Scholarships(PGS)/Canada Graduate Scholarships (CGS)

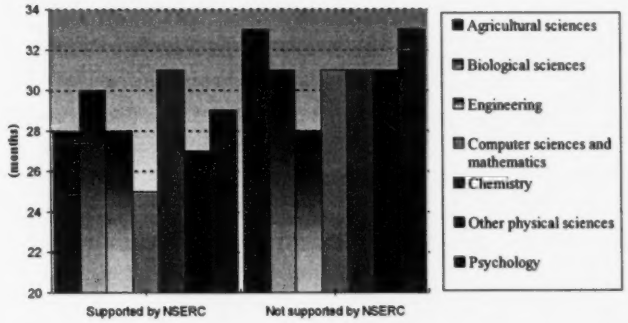
- The evidence shows clearly that the awards have significant positive impacts, such as: increasing student income, reducing the need to work for pay, reducing loan burdens, enhancing recipients' ability to study where they prefer, increasing doctoral students' involvement in core research activities, increasing Master's students' involvement in conducting research in various environments, increasing intellectual skills development (self assessed), improving employability (self assessed) and academic marketability.
- At the doctorate level, recipients of PGS and CGS awards appear to be somewhat more likely to have completed their degree at the time of the survey than students who did not get an award (23% and 18% respectively compared to 13% of non-awardees).
- Among award recipients, about 85% agreed that the federal government makes a significant contribution to supporting research training in Canada.
- Master's students who received either PGS or CGS awards and had since completed their degree were more likely than non recipients to hold a job that required a Master's degree, and to hold a job that relates to their studies.

Figure 2.3
Results Related to NSERC Scholarships and Fellowships

Undergraduate Students	Short-term Outcomes*	• 90% of the respondents rated their USRA work experience from "good" to "outstanding"; • Students report learning practical techniques and methods and gaining critical management skills; • 72% of students report that the supervision and instruction they received was excellent; • 80% of students increased or maintained their interest in research at a critical period of time in making their career choice; and • 75% of USRA Industrial students increased or maintained their level of interest in a career in industry;
	Longer-term Outcomes*	• A majority of students (70%) believe their USRA job experience will improve their permanent job prospects; and • A significant number (28%) of students plan to stay in university longer as a result of their USRA job experience, in addition to the one-third of students who already planned for a postgraduate education.
Postgraduate Students	Short-term Outcomes*	• 49% report that NSERC funding was "very important" to their decision to continue to graduate studies; • 98% of the respondents completed the degree (master's or doctoral) for which they received NSERC funding; • Nearly 44% of the students believed that NSERC funding would help them complete their degree faster; and • Average scientific output per student of 1.6 journal publications, 1.3 conference proceedings and 1.4 conference presentations.
	Longer-term Outcomes**	• Graduates experience far less unemployment (2.4%) than the national average (approximately 7%). 82% of students supported were working in Canada 9 years after their award. More than one-half of those abroad were planning to come back to Canada • The vast majority (93%) have found full-time employment. • More than one-half (59%) report research and development activities are part of their position. • Incomes are much higher than the Canadian average, with more than 74% earning more than $65,000 a year; and • 65% report their graduate training was "critical" to their current employment.
Postdoctoral Fellows	Short-term Outcomes*	• For 93% of PDFs, NSERC funding was moderately to very important in their decision to continue with their research in an academic environment. • Average scientific output per fellow of 3.7 journal publications, 1.6 conference proceedings and 2.1 conference presentations. • The vast majority (93%) of PDF holders felt they received adequate supervision. • 97% of respondents felt that their PDF award would improve their prospects of finding employment in a relevant area; and • Nearly 75% of PDF holders would repeat their decision to pursue a postdoctoral position after their doctoral degree.
	Longer-term Outcomes**	• PDF holders have an unemployment rate of 0%. • 82% of PDFs are earning more that $75,000 per year. • 71% of PDF holders obtained faculty positions at universities and now train the next generation of scientists and engineers; • The vast majority (89%) are still engaged in research, either as a university professor, research scientist or engineer; and • 78% of PDFs report their postdoctoral training was critical to their careers.

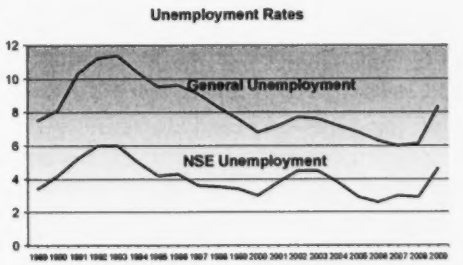
* Data from ongoing exit surveys after completion of the NSERC scholarship or fellowship.
** Data from career surveys nine years after scholarship award and 7 years after fellowship.

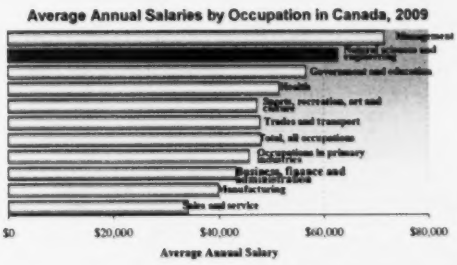
Figure 2.4
Average Time to Completion at the Master's Level by Field of Study

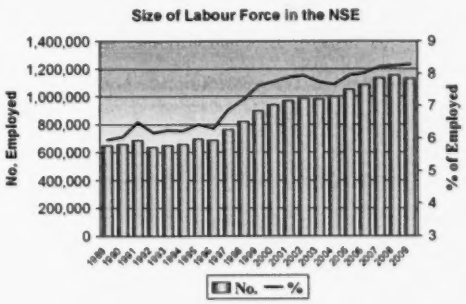


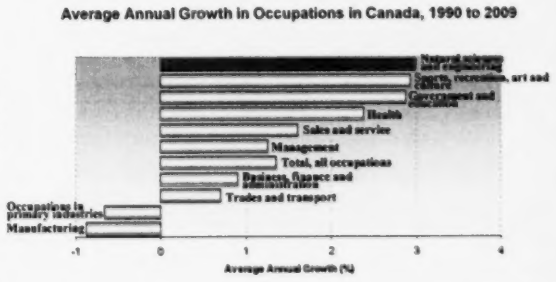
Source: Statistics Canada.

Figure 2.5
Labour Force Outcomes for Natural Scientists and Engineers (NSE)









Source: Statistics Canada

Canada's Economic Action Plan

Through Canada's Economic Action Plan (CEAP), the federal government temporarily expanded the Canada Graduate Scholarships program which supports Canada's top graduate students. This included $35 million over three years to the Canada Graduate Scholarships Program (CGS) in order for the Natural Sciences and Engineering Research Council of Canada to provide an additional 200 doctoral scholarships for three years beginning in 2009-10 and 400 master's scholarships in both 2009-10 and 2010-11.

Through CEAP, the federal government also provided an additional $3.5 million over two years to offer an additional 600 graduate internships in science and business, through the Industrial Research and Development Internship (IRDI) program launched in Budget 2007. The IRDI Program creates additional opportunities for skilled graduate students and postdoctoral fellows, by linking them with businesses that foster and utilize their talents. As a result, the program increases the science and technology (S&T) orientation of businesses and creates new opportunities for highly qualified personnel.

Accelerate Canada was awarded $2.5 million of the CEAP stimulus funding for the IRDI program as supplement to their current grant to provide an additional 350 internships in 2009-10, for a total of 1000 internships. In addition, following a strong performance review, their award is being extended by one year using the remaining $1 million from Budget 2009 and the original $5.8 million from Budget 2007, to deliver 1000 internships in 2010-11.

Although it is too early to have collected performance information for the CEAP spending, it is highly likely that the results will be very similar to the excellent results highlighted for postgraduate students and postdoctoral fellows in Figure 2.3.

Program Activity ► Attract and Retain Faculty

Description: This program activity aims to attract and retain faculty.			
Expected Result: Enhanced research capacity in science and engineering			
Performance Indicators	**Targets**	**Performance Status**	**Performance Summary**
• Number of foreign-educated new applicants to NSERC's Discovery Grants program	• Greater than 100 per year	• Exceeded	• Canada continues to attract faculty from abroad in large numbers (see Figures 2.6 and 2.7). Nearly 200 new Discovery grantees came from abroad in 2010.
• Number of NSERC-funded professors leaving the country	• Less than 100 per year	• Exceeded	• Less than 0.5% of NSERC grantees leave Canada to work abroad in a given year (see Figure 2.8). Only 16 left the country in 2009-10.

Financial Resources ($ millions) 2009-10		
Planned Spending	**Total Authorities**	**Actual Spending**
167.2	165.2	154.6

Human Resources (Full-Time Equivalents) 2009-10		
Planned	**Actual**	**Difference**
11	11	0

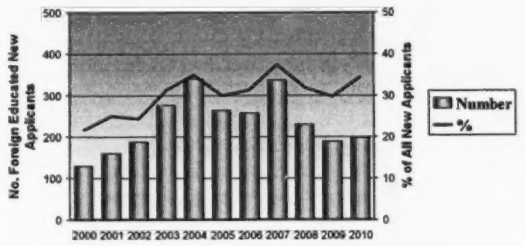
Key Programs		
Program	**Description**	**Expenditures 2009-10 ($ millions)**
Canada Research Chairs	This tri-agency (NSERC, CIHR and SSHRC) program provides financial support for up to 2,000 professors across Canada, including 900 positions within the NSE. The key objective of this program is to enable Canadian universities to achieve the highest levels of research excellence and to become world-class research centres in the global knowledge-based economy.	117.6
NSERC Industrial Research Chairs	NSERC's Industrial Research Chairs program helps universities build the critical mass of expertise and long-term relationships with corporate partners in areas of research that are of importance to industry. Industrial Research Chairs can also enhance the ability of universities to recruit senior-level researchers and research leaders from industry or other sectors.	27.0

Figure 2.6 presents the number of new applicants to NSERC's largest program, the Discovery Grants program, who received both their bachelor's and Ph.D. degrees outside the country (this number is a good proxy for an overall evaluation of the "attraction" activity since the vast majority of new professors in the natural sciences and engineering apply to the program). As the figure indicates, Canadian universities continue to attract hundreds of foreign educated personnel every year to become professors. More than 30% of the large number of first-time NSERC applicants are foreign educated. Recent investment by the government in university research has created an attractive environment to conduct research and highly trained people from other countries are coming to Canada to pursue their career.

The Canada Research Chairs program has helped to create a research environment that is conducive to the long-term retention and attraction of top researchers. A significant number of

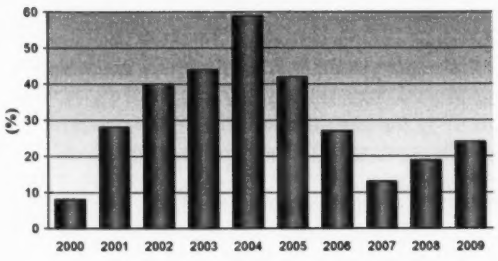
Chair holders have been attracted from outside Canada and many top Canadian scientists have stayed in the country as a result of Chair support. Figure 2.7 presents the percentage of external recruits awarded a Canada Research Chair in the natural sciences and engineering since the program's inception. (Note: fluctuations in Figure 2.7 are due to small cohorts in some years.)

Figure 2.6
Number of Foreign Educated[1] New Applicants to NSERC's Discovery Grants Program



1. Applicants who earned both an undergraduate and Ph.D. degree outside Canada.
Source: NSERC.

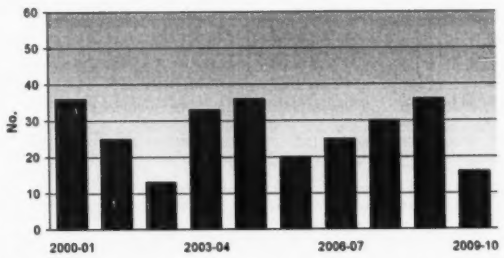
Figure 2.7
Canada Research Chair (NSERC) Recruitment from Abroad by Year (% of Chairs)



Source: Canada Research Chair Secretariat.

NSERC also tracks the reasons grantees provide when they terminate their awards before the end date. As shown in Figure 2.8, only a small number of professors receiving NSERC support listed "leaving the country" as the reason for terminating their award over the past decade. The number of NSERC-funded professors leaving the country is an extremely small percentage of the nearly 12,000 professors receiving NSERC support each year and is much smaller than the number of new professors attracted to Canada each year (see Figures 2.6 and 2.7).

Figure 2.8
Number of NSERC-Funded Professors Leaving the Country



Source: NSERC.

One of the 21 new Industrial Research Chairs in 2009-10 was awarded to Eldad Haber of the University of British Columbia for his work related to geosciences. A profile of Dr. Haber's Chair is presented below:

Eldad Haber
NSERC/ Barrick/Xstrata/Teck/Newmont/Vale Industrial Research Chair in Computational Geoscience

Electromagnetic methods have been used by the industry for the discovery of minerals, oil, underground contamination and, recently, to monitor CO_2. A key component in using the technology is the ability to simulate electromagnetic fields in highly homogeneous media and, given electromagnetic measurements, produce a 3D image of the earth that it is consistent with the data. The work proposed by the chair is the development of modern simulation and optimization algorithms and codes to produce a flexible and accurate representation of electromagnetic fields in the earth and the corresponding conductivity. The codes and algorithms developed in this research can improve the accuracy of mineral detection making exploration more profitable and with a smaller environmental footprint.

The chairholder has worked for Schlumberger and for the last seven years has been at Emory University's mathematics and computer science department as a computational science faculty member. For the last 15 years, the chairholder was involved in generating modeling and simulation codes for mining companies worldwide.

Mining and mining exploration represent a large part of the Canadian economy. Improving mining exploration by making it more economical and environmentally friendly is an important economic target. Furthermore, the generation of codes will take the industry to the next technological phase and will require highly qualified personnel who will bring more "high-tech" jobs to the mining industry.

Strategic Outcome:

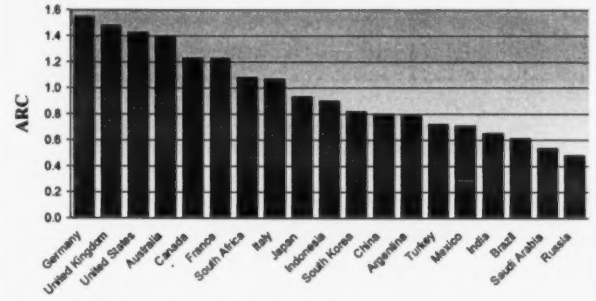
High Quality Canadian-Based Competitive Research in the NSE

NSERC promotes and enables global excellence in discovery research. Basic research provides the foundation for all scientific and technological advances, and also to train the people who can generate new knowledge in Canada and understand new knowledge generated around the world. Having a solid capacity for basic research across a broad range of traditional fields in natural sciences and engineering, to newly established fields like genomics, nanotechnology and quantum computing, ensures that Canada remains at the leading-edge of knowledge creation. It also ensures that Canada can access and exploit S&T developments from other countries.

One of the first tangible outcomes of an investment in university R&D is a publication in a scientific or engineering journal. Since the vast majority (nearly 90%) of Canada's scientific and engineering publications are produced by university researchers, publications are a good indicator of the immediate outcome from NSERC research funding and can be used to benchmark our performance against the rest of the world.

Similar to common rating systems, in which a higher score indicates more viewers, listeners or readers, citations are a measure of the potential use of a researcher's work by fellow researchers. If a researcher's work is being referenced or cited more often by his/her peers, then there may be more intrinsic value to the work. Based on the number of citations received by papers over the three years following the publication year, a standardized measure called the Average Relative Citation Factor (ARC) is then calculated for each country and field and normalized to 1.0 to indicate the world average. Figure 2.9 presents the ARC values for the G20 in the NSE in 2008. Canada's ARC in the NSE ranks 5th and is only slightly behind the top four countries.

Figure 2.9
Average Relative Citation Factor (ARC) in the NSE, 2008, G20 Countries



Source: Observatoire des sciences et des technologies.

The following provides details of NSERC's performance for the two program activities that fall under this strategic outcome. Resulting **benefits to Canada** include: global excellence in

discovery research, new knowledge, the ability to access and exploit knowledge developed outside Canada, and attracting the best minds to Canada and keeping them here by furnishing state-of-the-art equipment and facilities to carry out research at world-class levels.

Program Activity ► Fund Basic Research

Description: This program activity invests in discovery through grants focusing on basic research activities.			
Expected Result: The discovery, innovation and training capability of university researchers in natural sciences and engineering is enhanced by the provision of support for on-going programs of basic research.			
Performance Indicators	**Targets**	**Performance Status**	**Performance Summary**
• World ranking in number of publications.	• Maintain top 10 world ranking (Canada is currently 7th)	• **Met All**	• Canada has maintained its 7th place ranking in publication production (see Figure 2.11).
• Percentage of funds spent on training of students and postdoctoral fellows	• 35%	• **Exceeded**	• In 2009-10, 45.2% of Discovery Grants funds were used to support students and fellows (see Figure 2.13).
• Higher education expenditure on R&D (HERD) as a percentage of gross domestic product (GDP) compared to G8 countries	• Maintain current world ranking (Canada is currently 2nd)	• **Met All**	• Canada currently ranks 1st in HERD as a % of GDP in the G8 (see Figure 2.14).

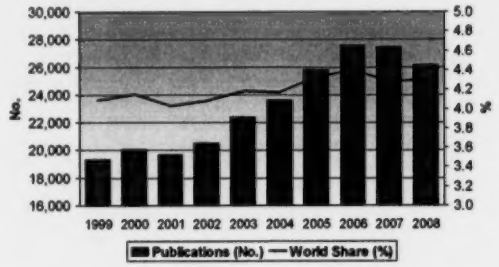
Financial Resources ($ millions) 2009-10		
Planned Spending	**Total Authorities**	**Actual Spending**
366.8	365.1	362.9

Human Resources (Full-Time Equivalents) 2009-10		
Planned	**Actual**	**Difference**
52	53	+1

Key Program		
Program	**Description**	**Expenditures 2009-10 ($ millions)**
Discovery Grants	The Discovery Grants program is the mainstay of support for university-based research. The program provides funding for ongoing programs of research. Researchers are free to work in the mode most appropriate for the research area and they may pursue new research interests provided they are within NSERC's mandate. To be funded, they must demonstrate both research excellence and high productivity, and contributions to the training of HQP.	343.4

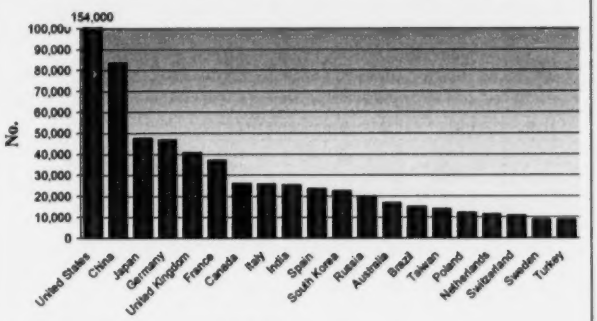
Canada is among an elite group of countries publishing a significant number of articles in science and engineering journals. Since the beginning of the century, Canadian researchers (all sectors) in the NSE have increased their annual production of publications from roughly 20,000 per year to current averages of approximately 25,000 publications per year, as shown in Figure 2.10. Overall, Canada's world share of NSE papers stood at 4.3% in 2008, ranking seventh in the world (see Figure 2.11). Indicators of productivity as they relate to scientific publication production can also be useful. One indicator is a measure of a country's output of NSE publications per capita population. Figure 2.12 presents the 2008 per capita output per one million inhabitants for the G8. Using this criterion, Canada has the highest per capita output.

Figure 2.10
Number of Canadian Publications in the NSE and World Share



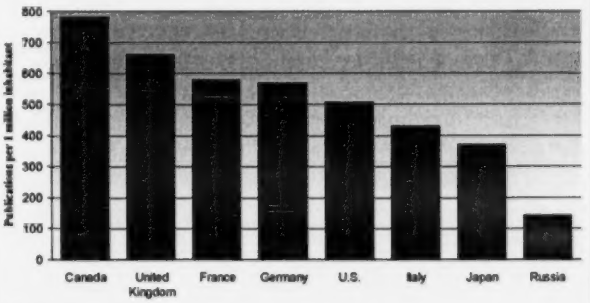
Source: Observatoire des sciences et des technologies p: preliminary data.

Figure 2.11
Top 20 Countries in Scientific Article Production in the NSE, 2008



Source: Observatoire des sciences et des technologies.

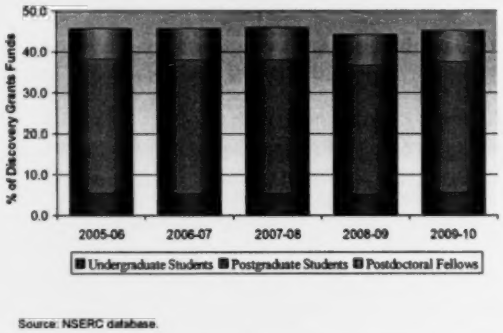
Figure 2.12
Per Capita Output of Publications in the NSE, 2008, G8 Countries



Sources: Observatoire des sciences et des technologies and OECD.

The training of highly qualified personnel (HQP) is of critical importance in the Discovery Grants program. Each year, nearly 50% of program expenditures are used by professors to support students at the undergraduate, master's and doctoral levels, and postdoctoral fellows (see Figure 2.13). In 2009-10, 10,700 students and fellows were supported by Discovery Grants funding.

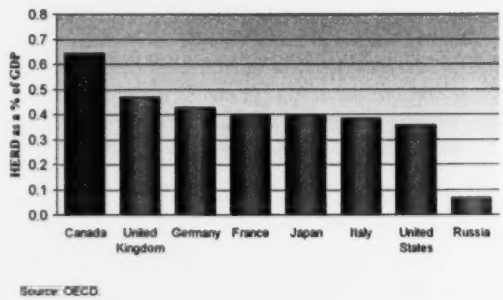
Figure 2.13
Percentage of Discovery Grants Funds Used to Support Students and Fellows



Source: NSERC database.

In 2008, member countries of the Organization for Economic Co-operation and Development (OECD) spent $191 billion on university research. Canadian university professors and students performed 5.3% of this total, up from 4.8% in 1999. When measured as a percentage of GDP, Canada spends more on university research than all of its G8 competitors (see Figure 2.14) and ranks 5th in the world.

Figure 2.14
Higher Education R&D (HERD) as a Percentage of GDP, 2008 or Most Recent Year



Source: OECD.

Program Activity ► Support for Research Equipment and Major Resources

Description: This program activity helps to support the establishment, maintenance and operation of the research equipment, major research resources and research capacity necessary to carry out high quality research in the natural sciences and engineering.			
Expected Result: The discovery, innovation and training capability of university researchers in the NSE is supported by their access to research equipment and major regional or national research facilities.			
Performance Indicators	**Targets**	**Performance Status**	**Performance Summary**
• Average number of researchers benefiting from equipment awards	• Over 1500	• Mostly met	• In 2009-10, 1,376 researchers benefited from an NSERC RTI grant (see Figure 2.15).
• Average number of researchers benefiting from a Major Research Support award	• Greater than 10	• Exceeded	• In 2009-10, 19 researchers, on average, per Major Research Support award were supported (see Figure 2.16).

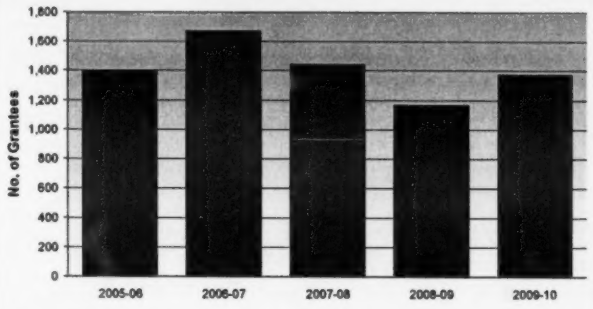
Financial Resources ($ millions) 2009-10		
Planned Spending	**Total Authorities**	**Actual Spending**
46.4	40.3	74.2

Human Resources (Full-Time Equivalents) 2009-10		
Planned	**Actual**	**Difference**
9	9	0

Key Programs		
Program	**Description**	**Expenditures 2009-10 ($ millions)**
Major Resources Support (MRS)	The MRS program supports researchers' access to major regional or national research facilities by assisting these facilities to remain in a state of readiness for researchers to use. This program is the vehicle for NSERC investments in facilities such as the Canadian Light Source synchrotron in Saskatoon.	36.8
Research Tools and Instruments Grants (RTI)	CFI funding enhances the laboratory setting by funding major equipment and infrastructure purchases. RTI grants enable professors to purchase the smaller pieces of laboratory equipment necessary to conduct world-class research. This critical source of funding ensures researchers have access to the modern research tools required to ensure the maximum return on other investments in research, such as Discovery Grants.	36.5

NSERC's Research Tools and Instruments (RTI) funding generally leads to more, faster and more in-depth research as well as better trained HQP. These impacts are felt across the spectrum of disciplines, in all regions and in large and small institutions. It is difficult for researchers to find funding for small equipment and NSERC is a major source. NSERC's RTI grants are capped at $150,000 and with most of the awards less than $80,000, there is currently no or little overlap between NSERC's RTI program and Canada Foundation for Innovation (CFI) grants. Figure 2.15 highlights the number of researchers benefiting from an NSERC RTI grant.

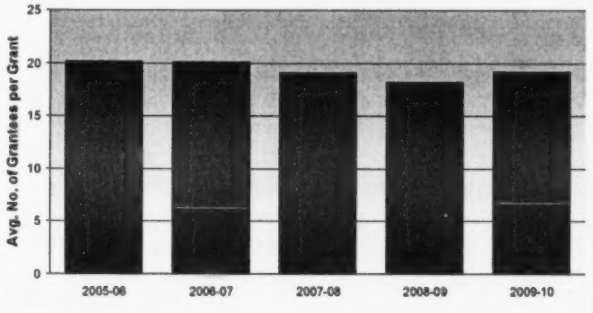
Figure 2.15
Number of Researchers Benefiting from an NSERC Research Tools and Instruments Grant



Source: NSERC database.

The Major Resources Support (MRS) program leads to a better use of the funded facilities, increased collaboration among researchers and improved international competitiveness of Canadian researchers. The program also complements CFI funding for several facilities (e.g., Canadian Light Source) by providing the necessary operating and maintenance support to fully utilize the facilities. Figure 2.16 presents the average number of researchers benefiting from an MRS award. The average value has been fairly steady over the past five years.

Figure 2.16
Average Number of Researchers per Grant Benefiting from an NSERC Major Resources Support Grant



Source: NSERC database.

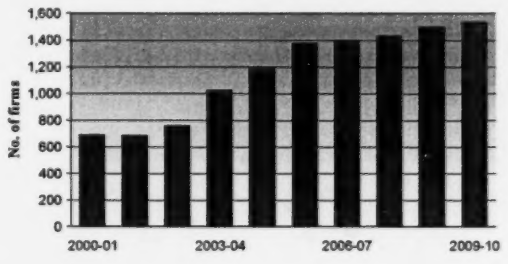
Strategic Outcome:

Productive Use of New Knowledge in the NSE

Wealth is created when Canadians add value in producing goods and services that are sold in world markets, and knowledge is the modern basis for adding value. NSERC aims to maximize the value of public investments in research for the benefit of all Canadians by promoting research-based innovation, academic-industry partnerships, knowledge and technology transfer activities and the training of people with the required scientific and business skill sets to create wealth from new discoveries in the NSE.

NSERC gives companies operating from a Canadian base access to the special knowledge, expertise and educational resources at Canadian postsecondary institutions and offers opportunities for mutually beneficial collaborations that result in industrial or economic benefits to Canada. The industrial partners contribute financially to university research projects, scholarships and fellowships. In 2009-10, more than 1,500 firms in Canada partnered with NSERC, up from the 700 partners in 2000-01 (see Figure 2.17). Over this ten-year period the average annual growth rate in the number of partners has been 9.3%. Sixty-two of the top 100 R&D firms in Canada are currently partners with NSERC (Note, many of the top 100 not partnering with NSERC are in the health/biotechnology sector).

Figure 2.17
Number of Industrial Partners Participating in NSERC Programs



Source: NSERC database.

The following provides details of NSERC's performance for the three program activities that fall under this strategic outcome. Resulting **benefits to Canada** include: building capacity in areas critical to the Canadian economy, in carefully selected strategic priorities for the country and connecting researchers with end users in order to transfer and exploit knowledge and to increase Canadian prosperity.

Program Activity ► Fund Research in Strategic Areas

Description: This program activity funds research in areas of national importance and in emerging areas that are of potential significance to Canada.			
Expected Result: Research and training in targeted and emerging areas of national importance is accelerated.			
Performance Indicators	**Targets**	**Performance Status**	**Performance Summary**
• Percentage of researchers applying for a strategic grant (or who have never applied in a specific area) for the first time	• Over 30%	• Mostly Met	• In 2009-10, 28.8% of applicants in the Strategic Project competition were new (see Figure 2.19).

Financial Resources ($ millions) 2009-10		
Planned Spending	**Total Authorities**	**Actual Spending**
124.1	124.2	104.0

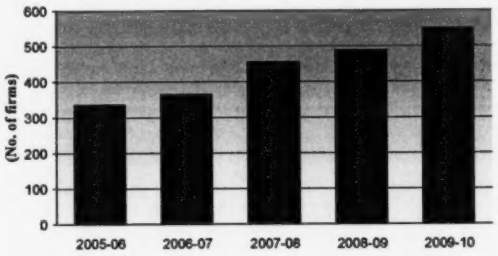
Human Resources (Full-Time Equivalents) 2009-10		
Planned	**Actual**	**Difference**
21	21	0

Key Programs		
Program	**Description**	**Expenditures 2009-10 ($ millions)**
Strategic Project Grants	This program accelerates research and training in targeted and emerging areas of national importance. The research is early-stage with the potential to lead to breakthrough discoveries. The program target areas coincide extremely closely to the government's current priority areas of the environment, energy, information and communications technologies, manufacturing, automotive applications, forestry, fisheries, and health.	61.0
Strategic Network Grants	This program funds large scale, complex research programs that involve multi-sectoral collaborations on a common research topic. The topic to be investigated can be of local concern, requiring a focused local network, or of regional or national importance, requiring a larger, more complex network.	31.9

The Strategic Partnerships Programs are designed to focus on priorities (NSERC Strategic Target Areas) and thus provide an excellent framework to implement the S&T Strategy. An analysis of the 2009-10 Strategic Partnerships Program grants indicated that more than 90% of program funding was devoted to government priority areas.

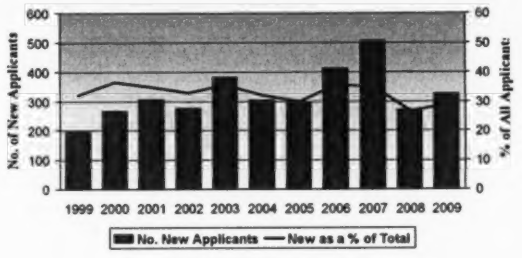
In 2009-10, a total of $27.5M was leveraged from partners in Strategic Partnership grants in addition to NSERC's funding of $92.9M. Given the pre-competitive nature of Strategic Partnership grants, the resulting leverage ratio of 30% indicates excellent partner participation. The number of industrial partners in these programs continues to grow and in 2009-10 stood at 550, for a 64% increase over the past five years (see Figure 2.18)

Figure 2.18
Number of Industrial Partners – Strategic Partnerships



Creating new partnerships between professors and industrial/government partners to facilitate the knowledge and technology transfer process in priority areas is an important component of the Strategic Projects program. Figure 2.19 presents the number of researchers who have applied for a Strategic Project grant for the first time. Overall, roughly 30% of applicants to the program are new each year.

Figure 2.19
Number of New Applicants to NSERC's Strategic Projects Grants Program



Program Activity ► Fund University-Industry-Government Partnerships

Description: This program activity fosters collaborations between university researchers and other sectors, including government and industry, in order to develop new knowledge and expertise, and to transfer this knowledge and expertise to Canadian-based organizations.			
Expected Result: Mutually beneficial collaborations between the private sector and researchers in universities, resulting in industrial or economic benefits to Canada.			
Performance Indicators	**Targets**	**Performance Status**	**Performance Summary**
• Percentage growth in partner contributions	• Greater than 5%	• Met All	• Average annual growth rate over the past ten years in industrial partner contributions on CRD grants has been 5% (see Figure 2.20).
• Partner satisfaction with research results	• 75% of partners indicating satisfaction	• Exceeded	• Post award surveys indicate that more than three-quarters of partners are extremely satisfied with their collaboration with university researchers and students.

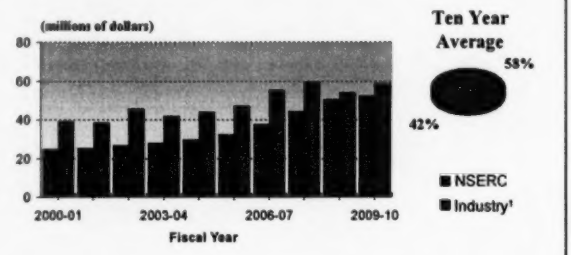
Financial Resources ($ millions) 2009-10		
Planned Spending	**Total Authorities**	**Actual Spending**
109.3	110.5	119.9

Human Resources (Full-Time Equivalents) 2009-10		
Planned	**Actual**	**Difference**
42	46	+4

Key Programs		
Program	**Description**	**Expenditures 2009-10 ($ millions)**
Collaborative Research and Development (CRD) Grants	This program gives companies operating from a Canadian base access to the unique knowledge, expertise and educational resources available at Canadian postsecondary institutions and offers opportunities for mutually beneficial collaborations that result in industrial or economic benefits to Canada.	52.5
Networks of Centres of Excellence (NCEs)	The Networks of Centres of Excellence (including the Business-Led Networks) are unique partnerships among universities, industry, government and not-for-profit organizations aimed at turning Canadian research and entrepreneurial talent into economic and social benefits for all Canadians. These nationwide, multidisciplinary and multi-sectoral research partnerships connect excellent research with industrial know-how and strategic investment. They create a critical mass of research capacity by networking researchers and partners across Canada.	47.6

Industrial contributions related to Collaborative Research and Development (CRD) Grants is an important indicator of the value NSERC's partners place on university research. A comparison of the NSERC funding and industry contributions to the CRD program is presented in Figure 2.20. NSERC's industrial partners contribute more to the CRD projects than NSERC and over the past 10 years the average annual growth rate in contributions has been an impressive 5%, increasing from $39 million in 2000-01 to $59 million in 2009-10.

Figure 2.20
Contributions to NSERC's Collaborative R&D Grants (CRD) Program



1. Best estimate.
Source: NSERC.

NSERC tracks the outcomes of its Collaborative Research and Development (CRD) program by following-up with researchers and partners. Results from the latest follow-ups are described below:

- Reports on CRD grants submitted by grantees required an overall ranking to assess the extent to which the overall objectives of the program were achieved. The answers were rated on a scale of 1 to 7 where 1 meant "not at all", the midpoint indicated "somewhat" and 7 indicated "to a great extent." 74% of reports responded with a rating of 6 or 7 indicating that objectives and milestones were achieved to a large extent. There were no responses that indicated that objectives were "not met at all".
- Out of 276 reports, 49% of the projects reported contribution to new products or processes and 67% of projects reported contribution to improved products or processes.
- There were 18 new licenses generated and 103 patents had been filed. Twenty four of those had been reviewed at the time reports were received. Start-up companies were created for 13 projects.

An evaluation of the CRD program was conducted in 2009-10 which covered the 1997-2008 period. A summary of the major findings is presented below.

Evaluation Results

Collaborative Research and Development (CRD) Program

- The CRD program enables industrial partners to benefit from collaborative R&D with a university-based expert on well-defined projects within the context of a wide variety of different needs and corresponding project objectives.
- As well as acquiring new knowledge from the CRD research results, 80% of industrial partners have observed concrete impacts stemming from CRD projects. These impacts include new products and services, which often allowed for increased competitiveness, as well as new or improved processes, which often led to increased productivity.
- Academic researchers who participated in the program created new knowledge and technologies that were extensively disseminated to the industrial partners and the wider academic community. Knowledge transfer was achieved through the attainment of several hundred patents and the publication of several thousand papers.
- Through their interactions with industrial partners and their exposure to R&D in industrially-relevant environments, students participating in CRD projects acquired valuable skills and experience and generally needed less training once in the work force. Consequently, a large proportion has since found employment in their field—including 10% within the industrial partner's organization.

In 2006, the Networks of Centres of Excellence (NCE) program, with the collaboration of the International Development Research Centre (IDRC), launched the International Partnership Initiative (IPI) as a pilot initiative. A total competition budget of approximately $7 million over two years was allocated to this initiative. Some of the findings from a 2009-10 evaluation of this element of the Networks of Centres of Excellence program are described below:

Evaluation Results

Networks of Centres of Excellence International Partnership Initiative (IPI)

- Overall, the impact of the IPI to date has been a focus on building the foundation for joint research to address common problems, particularly in areas/fields of global relevance, where solutions to problems require global strategies (e.g., research on climate change, research on common health issues such as obesity or stroke, research in new areas where researchers can benefit from internationally accumulated expertise such as stem cell research or research on prions, spread of diseases, and other areas/issues).
- Knowledge/awareness of Canadian research capabilities and research competence was enhanced for international partners.
- Knowledge/awareness of global research and knowledge transfer, as well as policy implementation issues, was enhanced for network researchers.
- Ability to promote Canadian research expertise at the international level.
- Support for organizations in low and middle-income countries to develop their own networking activities for countries where this had not been previously undertaken.
- Development of partnerships with international organizations and researchers, some of them leading to the submission of joint proposals.

In addition, an evaluation of the Network of Centres of Excellence -New Initiatives (NCE–NI) element was conducted in 2009-10. This pilot has been created to: facilitate the creation of networks on a national and an international level; support networking activities among well-established researchers or research teams to encourage them to develop new partnerships with receptor communities (e.g., industry, government, not-for-profit organizations, etc.); and respond

to the needs of both researchers and receptor communities for interaction, partnership, and networking.

Evaluation Results

Networks of Centres of Excellence -New Initiatives (NCE–NI) Pilot

- The success of the networks relied heavily on the NCE–NI funds they received for network infrastructure and management. The "NCE" branding associated with the networks also increased the buy-in of top researchers, organizations, and Board of Directors members in the networks. Knowledge/awareness of Canadian research capabilities and research competence was enhanced for international partners.
- Using leveraging as a proxy indicator of networking and knowledge transfer, results suggest excellent performance by the NCE–NI pilot in this regard.
- Hundreds of graduate students were actively engaged in network activities, such as through participation in governance or operational committees; in student-run auxiliary networks (developed for two of the networks); learning and skills development programs; knowledge mobilization projects; poster and oral presentation sessions; and more. Funding from the NCE-NI initiative improved the ability of the proponents to promote Canadian research expertise at the international level.
- The continued need of the NCE–NI pilot within the Canadian S&T system is high, as no other program in Canada develops and supports a networking and knowledge transfer infrastructure on an ongoing, large-scale and interdisciplinary basis.

Program Activity ► Support Commercialization

Description: This program activity supports innovation and promotes the transfer of knowledge and technology to Canadian companies.			
Expected Result: The transfer of knowledge and technology residing in Canadian universities and colleges to the user sector is facilitated.			
Performance Indicators	**Targets**	**Performance Status**	**Performance Summary**
• Increase in technology and knowledge transfer activities	• 5% growth	• Exceeded	For the eight years of data available (see Figure 2.21) the average annual growth rates for university commecialization indicators has exceeded 5% except for the number of inventions protected.

Financial Resources ($ millions) 2009-10		
Planned Spending	**Total Authorities**	**Actual Spending**
46.4	44.5	41.5

Human Resources (Full-Time Equivalents) 2009-10		
Planned	**Actual**	**Difference**
17	14	-3

Key Programs		
Program	**Description**	**Expenditures 2009-10 ($ millions)**
Centres of Excellence for Commercialization & Research (CECR)	The program funds world-class centres to advance research and facilitate commercialization of technologies, products and services. These centres operate in the priority areas of the S&T Strategy: information and communications technology, environment, energy and natural resources, and health.	19.1
College and Community Innovation Program (CCIP)	The objective of the CCI Program is to increase innovation at the community and/or regional level by enabling Canadian colleges to increase their capacity to work with local companies, particularly small and medium-sized enterprises (SMEs). It supports applied research and collaborations that facilitate commercialization, as well as technology transfer, adaptation and adoption of new technologies.	14.6
Idea to Innovation (I2I) Program	I2I accelerates the pre-competitive development of promising technologies and promotes its transfer to Canadian companies. The program supports R&D projects with recognized technology-transfer potential by providing crucial assistance to university researchers in the early stages of technology validation and market connection.	6.3

Statistics Canada currently conducts a survey of intellectual property (IP) commercialization in the university sector every year. The key results from the first seven surveys are highlighted in Figure 2.21. It is highly likely that the majority of the commercialization indicators in Figure 2.21 can be attributed to NSERC funding (all NSERC funding and not just the programs under this program activity). The sizeable increases seen over the eight-year period for most of the commercialization activities presented is a positive result.

Figure 2.21
Survey of University Intellectual Property Commercialization

Commercialization Activity	1999	2001	2003	2004	2005	2006	2007
Inventions disclosed	829	1,105	1,133	1,432	1,452	1,356	1,357
Inventions protected	509	682	597	629	761	707	668
New patent applications	616	932	1,252	1,264	1,410	1,442	1,634
Patents issued	325	381	347	397	374	339	479
Total patents held	1,826	2,133	3,047	3,827	3,961	4,784	4,185
New licences	218	320	422	494	621	437	538
Total active licences	1,109	1,338	1,756	2,022	2,836	2,038	2,679
Royalties from licensing ($M)	$18.9	$52.5	$55.5	$51.2	$55.2	$59.7	$52.5
Total spin-off companies	454	680	876	968	1,027	1,103	1,174

Source: Statistics Canada

The first awards under the Centres of Excellence for Commercialization and Research were made in late 2007-08. A formative evaluation of the program was conducted in 2009-10. Some of the highlights of the final report are presented below.

Evaluation Results

Centres of Excellence for Commercialization and Research (CECR)

- The CECR program has been implemented to date in a manner that will likely achieve its intended objectives. The peer review and excellence-based approach of the CECR Program's selection process were widely praised as key to ensure that funded centres will achieve the Program's intended research and commercialization outcomes.
- The program has funded centres that address all four priority areas of the S&T Strategy.
- Interview findings provided a number of early signs that the CECRs are making progress in contributing to most of the intended immediate research and commercialization outcomes of the CECR program.
- Many centres have secured provincial government support, and the centres are also often networked with international research institutions.

Program Activity ► Internal Services

Financial Resources ($ millions) 2009-10		
Planned Spending	**Total Authorities**	**Actual Spending**
25.9	30.0	27.7

Human Resources (Full-Time Equivalents) 2009-10		
Planned	**Actual**	**Difference**
180	190	+10

Section 3:

Supplementary Information

3.1 Financial Highlights

As at March 31, 2010
Condensed Statement of Financial Position

(in thousands of dollars)	Percentage Variance	2009-10	2008-09
Total Assets	-30.4%	8,272	11,878
Total Liabilities	-3.3%	11,801	12,210
Total Equity	-963.0%	(3,529)	(332)
Total Liabilities & Equity	-30.4%	8,272	11,878

For the year ended March 31, 2010
Condensed Statement of Operations

(in thousands of dollars)	Percentage Variance	2009-10	2008-09
Total Expenses	2.3%	1,059,925	1,036,116
Total Revenues	0%	3	3
NET COST OF OPERATIONS	2.3%	1,059,922	1,036,113

NSERC's administration costs are approximately five per cent of its total budget, which is low compared to similar agencies in Canada and around the world.

Financial Statements

NSERC's audited financial statements for the year ending March 31, 2010 can be found on-line at: http://www.nserc-crsng.gc.ca/_doc/Reports-Rapports/NSERCFinancialStatementsEnglish2009-2010.pdf.

3.2 List of Tables

The following tables are available on-line at: *http://www.tbs-sct.gc.ca/dpr-rmr/2009-2010/index-eng.asp*.

Table 1: Sources of Non-Respendable Revenue
Table 2: Details on Transfer Payment Programs (TPPs)
Table 3: Internal Audits and Evaluations